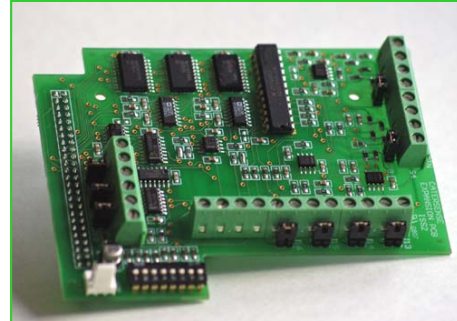


## Input / Output Expansion Module VV-EM-01

VV-EM-01 is used with the **VeroVent®** -01-B and -01-DD controllers to increase the number of analogue / digital inputs and analogue outputs on a controller.

The unit has 2 x 0~10v analogue inputs and 4 x UI universal inputs which can either be used as 0~10v analogue inputs or volt-free digital inputs. 2 x 0~10v analogue outputs are provided .

The module clips into the main controller PCB and has a power supply lead which is connected to J16 on the main controller PCB.

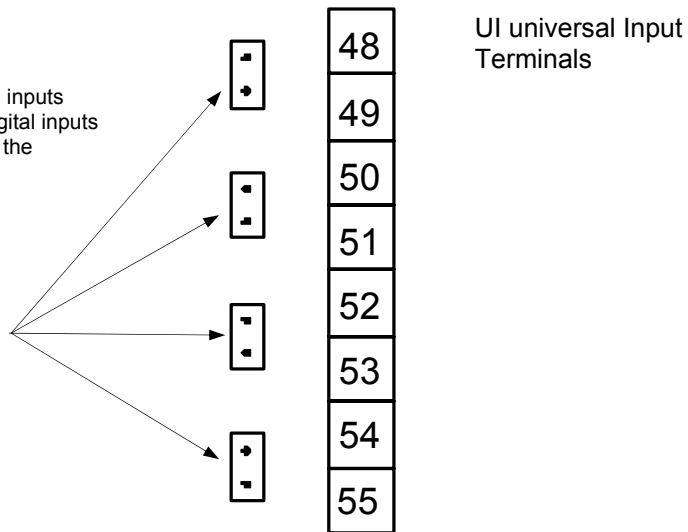


Model Type	Model	Description
	<b>VV-EM-01</b>	Input / Output Expansion Module
<b>Technical Data</b>	Power supply	Main PCB driven -12/0/+12vdc
<b>Wiring Terminals</b>	40	Sensor supply 24V
	41 AI-3	Input analogue signal 0~10v
	42	Sensor supply 0v
	43	RTN
	44	Sensor supply 24V
	45 AI-4	Input analogue signal 0~10v
	46	Sensor supply 0v
	47	RTN
	48 UI-1	Input analogue signal 0~10v
	49	0v
	50 UI-2	Input analogue signal 0~10v
	51	0v
	52 UI-3	Input analogue signal 0~10v
	53	0v
	54 UI-4	Input analogue signal 0~10v
	55	0v
	56 AO-3	Output analogue signal 0~10v
	57	0v
	58 AO-4	Output analogue signal 0~10v
	59	0v

### Choice of inputs

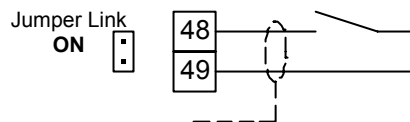
The VV-EM-01 module has 4 x UI universal inputs which can either be used as analogue or digital inputs by simply removing a jumper link alongside the respective input terminals.

With jumper link fitted the input is set for DIGITAL. Remove jumper link for 0~10v ANALOGUE inputs

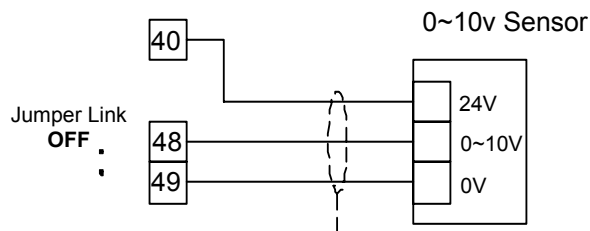


### UI Connection examples

#### Volt-free Digital Input



#### 0~10v Analogue Input



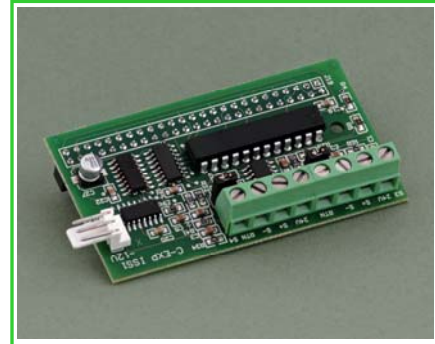
This symbol on this product or the package indicates that disposal of this product after its lifecycle could harm the environment.  
DO NOT dispose of this product (or batteries if used) as unsorted municipal waste. It should be disposed by a specialised company for recycling.  
This product should be returned to your distributor or to a local recycling service.  
Respect the local environment rules.

## 2 x AI/DI Input Expansion Module VV-EM-02

VV-EM-02 is used with the **VeroVent**<sup>®</sup> -01-B and -01-DD and **CaterSense**<sup>®</sup> controllers to increase the number of analogue / digital inputs on a controller.

The unit has 2 x 0~10v analogue inputs which can be used as analogue or digital depending on the connection arrangement.

The module clips into the main controller PCB and has a power supply lead which is connected between J3 on the expansion module to J16 on the main controller PCB.



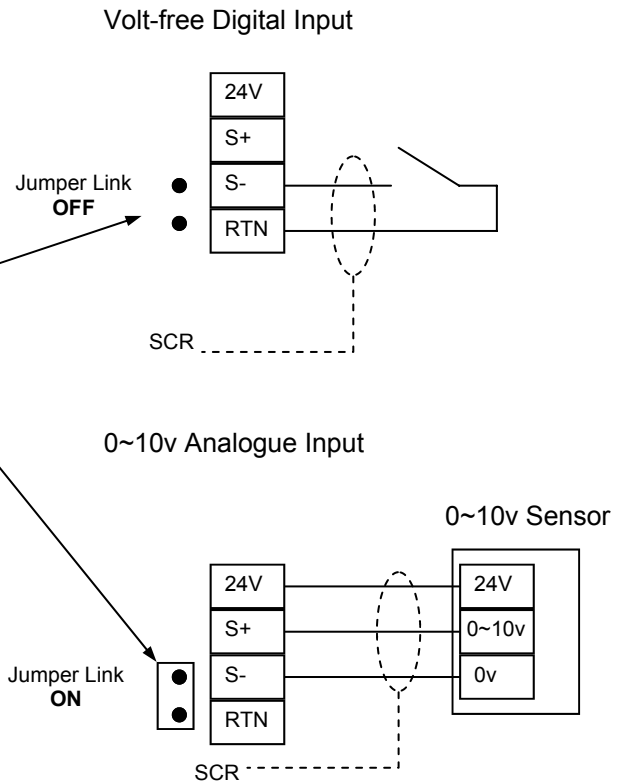
Model Type	Model	Description
	<b>VV-EM-02</b>	Input Expansion Module
<b>Technical Data</b>	Power supply	Main PCB driven -12/0/+12vdc
<b>Wiring Terminals</b>	<b>S3</b>	
	24v	Sensor supply 24V
	S+ AI-3	Input analogue signal 0~10v
	S-	Sensor supply 0v
	RTN	RTN
	<b>S4</b>	
	24v	Sensor supply 24V
	S+ AI-4	Input analogue signal 0~10v
	S-	Sensor supply 0v
	RTN	RTN

### Choice of inputs

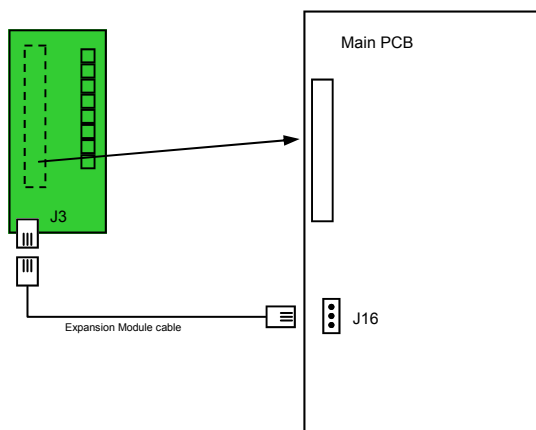
The VV-EM-02 module has 2 x AI universal inputs which can either be used as analogue or digital inputs by simply removing a jumper link alongside the respective input terminals.

With jumper link fitted the input is set for a three wire 0~10v ANALOGUE input, with the link removed the input is set for either a four wire 0~10v ANALOGUE input or a two wire DIGITAL input.

All expansion module inputs **MUST** be screened and wired in screen cable (Beldon or equal)



### Fixing Expansion Module



This symbol on this product or the package indicates that disposal of this product after its lifecycle could harm the environment. DO NOT dispose of this product (or batteries if used) as unsorted municipal waste. It should be disposed by a specialised company for recycling. This product should be returned to your distributor or to a local recycling service. Respect the local environment rules.